

The Builder

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INSTEAD of fresh professions which we have heretofore thought it desirable to make at the commencement of each succeeding volume, we are disposed, rather, to rest on what was done last year, and to point to the present number of the journal as an evidence of our intention not to relax in endeavours to render **THE BUILDER** useful and interesting to every one, but to take all the means in our power to make it more so. A single number, it is true, does not afford space to show the whole scope of the work: to judge it fairly and estimate rightly its "infinite variety," one of the monthly parts should be taken: still we think we may venture on the reference we have made. In this number will be found, amongst other matters, an essay on sanitary necessities, one on architectural practice, and a third on an archaeological point of interest; original news from all parts of England, Ireland, and Scotland; information from America and the Continent; many suggestions; reviews of several books and of new scenery and decorations; an engraving of The Fountain of the Cross, in Rouen, and a fine view of the new market at Billingsgate, recently completed.*

We would here say, in parenthesis, that we shall be glad to receive from architects and others increased facilities for laying before the public views and plans of new buildings, and details of new modes of construction. If architects looked at the matter rightly, they would see that we offer them a service, and would not force us, as is now and then the case, to scrow out the information we need, at the cost of much time and great inconvenience. Some of our professional contemporaries owe more to friendly consideration than they fancy. They may perhaps be startled, one of these days, by a little plain speaking, and, though they show no appreciation of silence or even of applause, be moved to great indignation by utterance. We speak, however, of exceptions, and only in the hope that these may become fewer.

The new buildings at Billingsgate were erected from the designs of Mr. Bunning: Mr. Jay was the contractor, and the cost of the whole will be about 20,000*l*.

Let us go a little into particulars. The Corporation of London having decided on the enlargement of Billingsgate-market, in consequence of the great increase in the quantity of fish brought by railway to London, a plan was suggested by Mr. Bunning for inclosing the site of Billingsgate dock, thereby greatly enlarging the area of the market, and giving the means of forming a sub-market for shell-fish. This suggestion having been adopted, the plan

was carried out by the erection of a river wall of Haytor granite, the foundation of which was (in consequence of the nature of the soil, and to ensure the sub-market being perfectly dry) carried to the depth of 14 feet below the soil of the river without the aid of a coffer-dam. The river front of the new market is also now just completed, and is of red brick and Portland stone, except the columns of the arcades and the ornamental panels above, which are of cast-iron. The Clock Tower will contain a clock by Messrs. Thwaites and Reed, showing four illuminated dials, 5 feet in diameter; and the belfry will contain a market and high-water bell and the clock bells. In the wing buildings are offices for the clerk of the market, oyster tasters, inspectors of fish, &c.

The roofing over the market is of galvanized corrugated iron, in a semicircular form, supported by light cast-iron columns and girders; with skylights towards the north, glazed with ground plate-glass. Mr. Walker was the contractor for the iron roofing. The portion of the market next Thames-street will contain a warehouse for storing dried fish.

The ventilation and cleansing are to be effected by mechanical means. For the former, a centrifugal exhausting machine, and for the second a centrifugal pump, have been fitted up by Mr. Bessemer. The exhausting machine consists of two discs of iron, 8 feet in diameter, and having a central opening of half that size, placed on a shaft, 2 feet apart from each other, and attached by eight radial partitions, forming a series of segmental chambers around the axis: a communication is established between the central openings of this disc and the place to be exhausted, by several underground channels branching off to different points, where openings are formed for the inlet of the air, while the external diameters of the discs communicate with an air-shaft leading upwards above the roof of the building, where the foul air is dispersed. "When a rapid rotary motion is communicated to the disc, the air contained in its segmental chambers immediately acquires centrifugal force, and escapes at the outer edge of the disc, while new portions of air rush to the centre of it from all the numerous inlets before referred to, and thus fill up the vacuum formed by the escape of it at the periphery; so that a continuous and powerful action is kept up, carrying out of the market at least 50,000 cubic feet of foul air per minute, the space previously occupied by which is immediately reoccupied with fresh air from the open court next the river."* By the pump, two tons of water per minute, it is said, will be lifted 35 feet high from filters in the bed of the Thames, and then to a

fountain in the upper market; while a large quantity of unfiltered water will be lifted from the river, and circulate through a series of covered gutters in both markets, to carry off the drainage from the stalls.

Billingsgate, at one time rivalled by Queenhithe, has been a fish-market for centuries. In 1558 it was declared "an open place for the landing and bringing in of any fish, corn, salt stores, victuals, and fruit (grocery wares excepted), and to be a place of carrying forth of the same, or the like, and for no other merchandizes."** Stow says, "Geffrey Monmouth writes, that Belin, a king of the Britons, about four hundred years before Christ's nativity, built this gate, and named it Belin's gate,"—but he suggests that it more probably had its name from some later owner. The market begins at five o'clock in the morning, when the scene is worth a visit. Of salmon alone, the quantity annually brought to Billingsgate is said to be more than 2,500 tons.

The frequenters of the place have, or rather had, a language of their own, which made "Billingsgate" and "coarse words" synonymous. Improvement in this respect is observable, and the new buildings, suggesting notions of respectability, decency, and order, will, it may be expected, complete the cure.

The present year promises to be a busy one, and we will try to play in it a useful part. As we said on a similar occasion five years ago, the spread of architectural knowledge; the improvement of dwelling-places; the science of heat, of sound, of ventilation; legislative enactments affecting constructions, and the due administrations of them; facilities of communication; the dissemination of a knowledge and love of art; and the score of other objects which specially occupy our pages, are but means to an end,—and that end is, the accommodation, health, well-being, happiness, goodness, of the community at large.

THE PRACTICE OF SANITATION.

SANITATION, to use the term in its widest sense, has now passed a trying stage of its existence. Learned men have made clear the unerring principles on which depend the proper carrying on of the functions of life: philanthropists have with patient and laborious investigation, collected a numerous array of striking facts in connection with the subject; and men with clear heads and ready pens have, through the medium of the all-powerful press, diffused these through nearly all the ramifications of society;—and thus by dint of the perseverance which ensures success, sanitation may be said to be clear of the danger of being forgotten or overlooked; that it has, in truth, taken the position of a comprehensive science, involving much that is of paramount importance to all civilized communities. And yet, although few are found who have the hardihood to deny the truth of its principles, or the im-

* See pp. 8 and 9.

* Weale's "London."

** Quoted in "Handbook for London."